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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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NEAL, GERBER, & EISENBERG
SUITE 2200
2 NORTH LASALLE STREET
CHICAGO, IL 60602

EXAMINER

VEILLARD, JACQUES

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,575

Applicant(s)

JUDD ET AL.

Examiner

Jacques Veillard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) 13-21, 28, 29, 37-50, 53-58 and 64-70 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36, 51 and 52 is/are allowed.
- 6) ☒ Claim(s) 1-12, 22-24, 27, 31-35, 59 and 61 is/are rejected.
- 7) ☒ Claim(s) 25, 26, 60, 62 and 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is responsive to the Applicant's communication filed on 3/25/2004.
2. Claims 1-12, 22-26, 27, 30-336, 51-52, and 59-63 have been elected.
3. Claims 1-12, 22-26, 27, 30-36, 51-52, and 59-63 are pending and presented for examination.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 2/2/2001 (Paper No. 4) was filed after the mailing date of the application on 12/20/2000. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

5. Claim 62 is objected to because of the following informalities: "the method of claim 1", on the first line should be, ---the method of claim 61---. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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7. Claims 1-12, 22, 23, 24, 30-35, and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Rothschild et al. (U. S. Pat. No. 6,678,703, hereinafter Rothschild).

As per claim 1, Rothschild discloses a medical image management system and method that uses a central data management system to centrally manage the storage and transmission of electronic records containing medical images between remotely located facilities (See The Title and the abstract lines 1-5). Similarly, the managing medical images as taught by Rothschild comprising: receiving a plurality of medical images created by a plurality of medical imaging devices each of which processes the medical images using a unique image format; and converting the medical images to a common image format, suitable for display on a computer screen (See col.8, lines 55-67, col.9, lines 1-8, col.10, lines 52-54 and col.14, lines 50-53).

As per claim 2, Rothschild discloses the claimed limitation, comprising storing the converted images in an image database (See the abstract lines 1-5, col.16, lines 3-8, line 66 through col.17, line 5).

As per claims 3-5, Rothschild discloses an IP address which includes a browser uses to navigate the web and generate web pages permitting the aspect of posting the converted images for access via a client computer, embedding image tags in the browser compatible pages point to the converted images and for access via standard Internet procedures on a client computer having standard browser capability (See col.15, lines 14-18, lines 43-53; and col.22, lines 48-67).

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As per claim 6, Rothschild discloses the claimed limitation, comprising displaying at least one of the converted images on a client computer in response to a user request by using a viewing system as show in Fig.3 (See Fig.3 and corresponding text).

As per claim 7, Rothschild discloses the claimed limitation, wherein receiving the plurality of medical images comprises transferring the images from a plurality of scanners (See col.9, lines 28-30).

As per claim 8, Rothschild discloses the claimed limitation, wherein receiving the plurality of medical images comprises transferring the images from a computer readable medium (See the abstract lines 1-5).

As per claim 9, Rothschild discloses the claimed limitation, comprising notifying a user via automatic electronic messaging that the images are accessible for display on a client computer (See col.15, lines 54-64).

As per claims 10-12, Rothschild discloses a medical image management system and method wherein storing the images as pixel values according to a predetermined standard Internet compatible process, adjusting brightness and contrast, cropping the images are primarily incorporated in the display of fig.3(See Fig.3 and corresponding text, and col.19, lines 51-56, and lines 66 through col.20, line 8).

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As per claim 22, Rothschild discloses a medical image management system and method that uses a central data management system to centrally manage the storage and transmission of electronic records containing medical images between remotely located facilities (See The Title and the abstract lines 1-5). Similarly, the managing medical images as taught by Rothschild comprising: in response to a user request (See col.32, line 64 through col.33, line 2), pulling images from a scanner (See 9, line 30); converting the pulled images to a common image format compatible for display at a computer (See col.8, lines 55-67, col.9, lines 1-8, col.10, lines 52-54 and col.14, lines 50-53); and posting the converted images to a database for subsequent display at a client computer in response to a second user request(See col.16, line 67 to col.17, line 5).

As per claim 23, Rothschild discloses a medical image management system and method, comprising notifying the user by automatic electronic messaging when the images are posted, whereby the users may view the images at a client computer (See col.15, line 65 through col.16, line 20, and Fig.10 and corresponding text).

As per claim 24, Rothschild discloses a medical image management system and method that uses a central data management system to centrally manage the storage and transmission of electronic records containing medical images between remotely located facilities (See The Title and the abstract lines 1-5). Similarly, the managing medical images as taught by Rothschild comprising: receiving a plurality of images corresponding to a plurality of modalities (See col.19, lines 20-31); and displaying to a user at a client computer a selection comprising images associated with at least two different modalities (See col.19, line61 through col.20, line12).

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As per claim 30, Rothschild discloses a medical image management system and method that uses a central data management system to centrally manage the storage and transmission of electronic records containing medical images between remotely located facilities (See The Title and the abstract lines 1-5). Similarly, the managing medical images as taught by Rothschild comprising: converting a medical image to a common browser compatible image format (See col.8, line 55 through col.9, line 9, col.10, lines 52-54, and col.14, lines 50-55); and posting the medical image in a database accessible via a client computer, whereby a user may view the images via a client computer (See col.16, line67 through col.17, line 5).

As per claim 31, Rothschild discloses a medical image management system and method, comprising, in response to a request from a user at a client computer, (a IP notifier/ data requestor see fig. 10 element 402 in conjunction with component 400) notifying the user when one of the converted images is accessible for viewing (See col.31, lines 13-30).

As per claim 32, Rothschild discloses a medical image management system and method, wherein notifying the user comprises transmitting an electronic message to a location determined by the user (See col.9, lines 49-62, col.12, lines 5-13, and col.29, lines 25-29).

As per claims 33 and 59, the claims have substantially the same limitations as claim 30. These limitations have already been addressed in the rejection of claim 33. Except that the claims use a transfer engine, which is, also teach by Rothschild (See the abstract lines 1-5, col.1, lines 10-12) wherein Rothschild uses a transfer engine to manipulate the transmissions of electronic

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records containing medical images. Therefore, they are rejected on similar grounds corresponding to the arguments given for the rejected claim 33 above.

As per claim 61, Rothschild discloses a medical image management system and method, comprising a server connected for retrieving images from a database of browser compatible images in response to a user input (See col.6, lines 39-42, and col.21, lines 47-49).

As per claim 34, Rothschild discloses an IP address which includes a browser uses to navigate the web and generate web pages, wherein the post engine is adapted to generate html pages containing image tags pointing to the converted images(See col.15, lines 14-18, lines 43-53, and col.22, lines 48-67).

As per claim 35, Rothschild discloses a medical image management system and method, comprising an image database coupled to the post engine, wherein the image database comprises images from a plurality of modalities (See col.19, line61 through col.20, line12).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (U. S. Pat. No. 6,678,703, hereinafter Rothschild) in view of Strawder (U. S. Pat. No. 6,282,513).

As per claim 27, Rothschild discloses a medical image management system and method (See the Title) comprising storing in a database medical images (See the abstract, lines 1-5, col.1, line10-12) converted to a browser compatible format (See col.8, lines 59-63). Rothschild does not teach the system wherein the images correspond to at least two different examination times; displaying at a client computer a selection of images associated with at least two different times; and in response to a user request, displaying at the client computer the images corresponding to at least one of the two different examination times.

However, Strawder teaches a method includes the features wherein the images correspond to at least two different examination times; displaying at a client computer a selection of images associated with at least two different times; and in response to a user request, displaying at the client computer the images corresponding to at least one of the two different examination times (See col.1, lines 24-25, col.4, lines 33-35, col.5, lines 32-55, col.9, lines 27-31, col.10, lines 28-29, col.11, lines 26-27, and col.12, lines 26-27).

It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention was made to modify the medical image management system and method teaches by Rothschild with the skill and performance method of a physician or operator during an examination or procedure teaches by Strawder because Strawder provides a method wherein a technologist can takes an X-ray of any given body part of a patient and provides images.

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correspond to at least two different examination times, associated with at least two different times.

Allowable Subject Matter

10. Claims 36, 51-52 are allowed over the prior of record.

11. Claims 25, 26, 60, and 62-633 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

Regarding independent claims 36 and 51, the prior art taken singularly or in combination fail to teach or suggest a method or system for: pulling a first image data having a first data format from a first scanner; pulling a second image data having a second data format, different from the first data format, from a second scanner; and converting the first and second image data having the first and second data formats to a browser compatible data format.

The prior art taken singularly or in combination fail to teach or suggest a method or system for displaying simultaneously, in response to the user selection, at the client computer images corresponding to at least two different modalities side by side as recited in claims 25 and 26.

Regarding claim 60, the prior art taken singularly or in combination fail to teach or suggest a method or system with a physiologic knowledge engine for reducing the image pixel

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data without loss of diagnostic data connected to receive the extracted pixel data; and an encoding engine for converting image pixel data

As per claims 62, 63, the prior art taken singularly or in combination fail to teach or suggest a method or system comprising adjusting a movie frame rate based upon a priori knowledge, wherein the a priori knowledge comprises physiological knowledge respectively associated with the medical images

Other Prior Art Made Of Record

13. Kitney, R.I, et al.: (" An object oriented multi-modality display and analysis system incorporating DICOM3", IEEE, 25-28 September 1994, Pg 181-183,

Sitka et al.

U. S. Pat. No. 6,349,373,

Yale et al.

U. S. Pat. No. 6,159,150,

Brackett et al.

U. S. Pat. No. 6,210,327,

Zur et al.

U. S. Pat. No. 6,178,225,

Finger et al.

U. S. Pat. No. 6,171,244, and

Smith et al.

U. S. Pat. 6,487,599.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any response to this action should be mail to:

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Commissioner of Patent and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 746-7239 (for formal communication intended for entry)

Or:

(703) 746-7240 (for informal of draft communications, please label


"PROPOSED" or "DRAFT")

Hand - delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington.

VA, Fourth Floor Lobby (Receptionist Telephone No. (703) 305-3900).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (703) 305-7094. The examiner can normally be reached Monday through Friday from 9:30 AM to 4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached on (703) 305-3830. The fax phone number for this group is (703) 308-5403.


CHARLES RONES
PRIMARY EXAMINER



Jacques Veillard
Patent Examiner TC 2100

June 10, 2004